IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A ~~biphasic defibrillation waveform~~ defibrillator comprising:

a biphasic voltage waveform generator circuit, the circuit generating a waveform that includes:

a positive voltage phase beginning at about zero volts and having an initial positive voltage magnitude greater than zero volts, the positive voltage phase having a first positively sloped portion extending from the initial positive voltage magnitude to a maximum positive voltage magnitude greater than the initial positive voltage magnitude; and

a negative voltage phase having an initial maximum negative voltage magnitude less than zero volts extending from the maximum positive voltage magnitude of the positive voltage phase, the negative voltage phase having a second positively sloped portion extending from the initial maximum negative voltage magnitude to a terminal negative voltage magnitude ~~greater~~ less than the initial maximum negative voltage magnitude.

2. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 1, wherein the initial positive voltage magnitude is in a range from about 0 volts to about 50 volts.

3. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 1, wherein the maximum positive voltage magnitude is in a range from about 200 volts to about 400 volts.

4. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 1, wherein the initial maximum negative voltage magnitude is in a range from about -200 volts to about -400 volts.

5. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 1, wherein the terminal negative voltage magnitude is in a range from about -50 volts to about 0 volts.

6. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 1, wherein the first positively sloped portion comprises a substantially linear slope.

7. (Withdrawn) The waveform, as set forth in claim 1, wherein the first positively sloped portion comprises a continuously increasing slope.

8. (Withdrawn) The waveform, as set forth in claim 1, wherein the first positively sloped portion comprises a continuously decreasing slope.

9. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim 1, wherein the second positively sloped portion comprises a substantially linear slope.

10. (Withdrawn) The waveform, as set forth in claim 1, wherein the second positively sloped portion comprises a continuously increasing slope.

11. (Withdrawn) The waveform, as set forth in claim 1, wherein the second positively sloped portion comprises a continuously decreasing slope.

12. (Withdrawn) A biphasic defibrillation waveform comprising:

a positive voltage phase having an initial voltage magnitude equal to about zero volts and having a first positively sloped portion extending from the initial voltage magnitude to a maximum positive voltage magnitude greater than the initial voltage magnitude; and

a negative voltage phase having an initial negative voltage magnitude less than or equal to zero volts extending from the maximum positive voltage magnitude of the positive voltage phase, the negative voltage phase having a second sloped portion extending from the initial negative voltage magnitude to a terminal negative voltage having a magnitude less than or equal to zero volts.

13. (Withdrawn) The waveform, as set forth in claim 12, wherein the maximum positive voltage magnitude is in a range from about 200 volts to about 400 volts.

14. (Withdrawn) The waveform, as set forth in claim 12, wherein the initial negative voltage magnitude is in a range from about 0 volts to about -400 volts.

15. (Withdrawn) The waveform, as set forth in claim 12, wherein the terminal negative voltage magnitude is in a range from about 0 volts to about -400 volts.

16. (Withdrawn) The waveform, as set forth in claim 12, wherein the first positively sloped portion comprises a substantially linear slope.

17. (Withdrawn) The waveform, as set forth in claim 12, wherein the first positively sloped portion comprises a continuously increasing slope.

18. (Withdrawn) The waveform, as set forth in claim 12, wherein the first positively sloped portion comprises a continuously decreasing slope.

19. (Withdrawn) The waveform, as set forth in claim 12, wherein the second sloped portion comprises a positive slope.

20. (Withdrawn) The waveform, as set forth in claim 19, wherein the second sloped portion comprises a substantially linear slope.

21. (Withdrawn) The waveform, as set forth in claim 19, wherein the second positively sloped portion comprises a continuously increasing slope.

22. (Withdrawn) The waveform, as set forth in claim 19, wherein the second positively sloped portion comprises a continuously decreasing slope.

23. (Withdrawn) The waveform, as set forth in claim 12, wherein the second sloped portion comprises a negative slope.

24. (Withdrawn) The waveform, as set forth in claim 23, wherein the second sloped portion comprises a substantially linear slope.

25. (Withdrawn) The waveform, as set forth in claim 23, wherein the second positively sloped portion comprises a continuously increasing slope.

26. (Withdrawn) The waveform, as set forth in claim 23, wherein the second positively sloped portion comprises a continuously decreasing slope.

27. (Withdrawn) A biphasic defibrillation waveform comprising:

a positive voltage phase having an initial maximum positive voltage magnitude greater than zero volts and having a first negatively sloped portion extending from the initial maximum positive voltage magnitude to a terminal positive voltage magnitude less than the initial maximum positive voltage magnitude; and

a negative voltage phase having an initial negative voltage magnitude less than or equal to zero volts extending from the terminal positive voltage magnitude of the positive voltage phase, the negative voltage phase having a second sloped portion extending from the initial negative voltage magnitude to a terminal negative voltage having a magnitude less than or equal to zero volts.

28. (Withdrawn) The waveform, as set forth in claim 27, wherein the initial maximum positive voltage magnitude is in a range from about 200 volts to about 400 volts.

29. (Withdrawn) The waveform, as set forth in claim 27, wherein the terminal positive voltage magnitude is in a range from about 50 volts to greater than 0 volts.

30. (Withdrawn) The waveform, as set forth in claim 27, wherein the initial negative voltage magnitude is in a range from about 0 volts to about -400 volts.

31. (Withdrawn) The waveform, as set forth in claim 27, wherein the terminal negative voltage magnitude is in a range from about 0 volts to about -400 volts.

32. (Withdrawn) The waveform, as set forth in claim 27, wherein the first negatively sloped portion comprises a substantially linear slope.

33. (Withdrawn) The waveform, as set forth in claim 27, wherein the first negatively sloped portion comprises a continuously increasing slope.

34. (Withdrawn) The waveform, as set forth in claim 27, wherein the first negatively sloped portion comprises a continuously decreasing slope.

35. (Withdrawn) The waveform, as set forth in claim 27, wherein the second sloped portion comprises a positive slope.

36. (Withdrawn) The waveform, as set forth in claim 35, wherein the second sloped portion comprises a substantially linear slope.

37. (Withdrawn) The waveform, as set forth in claim 35, wherein the second positively sloped portion comprises a continuously increasing slope.

38. (Withdrawn) The waveform, as set forth in claim 35, wherein the second positively sloped portion comprises a continuously decreasing slope.

39. (Withdrawn) The waveform, as set forth in claim 27, wherein the second sloped portion comprises a negative slope.

40. (Withdrawn) The waveform, as set forth in claim 39, wherein the second sloped portion comprises a substantially linear slope.

41. (Withdrawn) The waveform, as set forth in claim 39, wherein the second positively sloped portion comprises a continuously increasing slope.

42. (Withdrawn) The waveform, as set forth in claim 39, wherein the second positively sloped portion comprises a continuously decreasing slope.

~~43~~ 8. (Currently Amended) A ~~biphasic defibrillation waveform~~ defibrillator comprising:

a biphasic voltage waveform generator circuit, the circuit generating a waveform that includes:

a positive voltage phase having an initial positive voltage having a magnitude greater than or equal to zero volts and having a first sloped portion extending from the initial positive voltage to a terminal positive voltage having magnitude greater than or equal to zero volts, the positive phase waveform shape independently selectable from a first set of waveform shapes; and

a negative voltage phase having an initial negative voltage having a magnitude less than or equal to zero volts extending from the terminal positive voltage of the positive voltage phase, the negative voltage phase having a second sloped portion extending from the initial negative voltage to a terminal negative voltage having a magnitude less than or equal to zero volts, the negative waveform shape independently selectable from a second set of waveform shapes.

~~44~~ 9. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim ~~43~~ 8, wherein the initial positive voltage magnitude is in a range from about 0 volts to about 400 volts.

~~45~~ 10. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim ~~43~~ 8, wherein the terminal positive voltage magnitude is in a range from about 0 volts to about 400 volts.

11 8
~~46~~. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim ~~43~~, wherein the initial negative voltage magnitude is in a range from about 0 volts to about -400 volts.

12 8
~~47~~. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim ~~43~~, wherein the terminal negative voltage magnitude is in a range from about 0 volts to about -400 volts.

13 8
~~48~~. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim ~~43~~, wherein the first sloped portion comprises a positive slope.

14 13
~~49~~. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim ~~48~~, wherein the first sloped portion comprises a substantially linear slope.

50. (Withdrawn) The waveform, as set forth in claim 48, wherein the first sloped portion comprises a continuously increasing slope.

51. (Withdrawn) The waveform, as set forth in claim 48, wherein the first sloped portion comprises a continuously decreasing slope.

52. (Withdrawn) The waveform, as set forth in claim 43, wherein the first sloped portion comprises a negative slope.

53. (Withdrawn) The waveform, as set forth in claim 52, wherein the first sloped portion comprises a substantially linear slope.

54. (Withdrawn) The waveform, as set forth in claim 52, wherein the first sloped portion comprises a continuously increasing slope.

55. (Withdrawn) The waveform, as set forth in claim 52, wherein the first sloped portion comprises a continuously decreasing slope.

15 8
56. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim ~~43~~, wherein the second sloped portion comprises a positive slope.

16 15
57. (Currently Amended) The ~~waveform~~ defibrillator, as set forth in claim ~~56~~, wherein the second sloped portion comprises a substantially linear slope.

58. (Withdrawn) The waveform, as set forth in claim 56, wherein the second positively sloped portion comprises a continuously increasing slope.

59. (Withdrawn) The waveform, as set forth in claim 56, wherein the second positively sloped portion comprises a continuously decreasing slope.

60. (Withdrawn) The waveform, as set forth in claim 43, wherein the second sloped portion comprises a negative slope.

61. (Withdrawn) The waveform, as set forth in claim 60, wherein the second sloped portion comprises a substantially linear slope.

62. (Withdrawn) The waveform, as set forth in claim 60, wherein the second positively sloped portion comprises a continuously increasing slope.

63. (Withdrawn) The waveform, as set forth in claim 60, wherein the second positively sloped portion comprises a continuously decreasing slope.

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64. (Currently Amended) A method of generating a biphasic defibrillation waveform comprising the acts of:

generating a positive voltage phase having an initial positive voltage having a magnitude greater than zero volts and having a first sloped portion extending from the initial positive voltage to a terminal positive voltage having magnitude greater than or

equal to zero volts, the positive phase waveform shape independently selectable from a first set of waveform shapes; and

generating a negative voltage phase having an initial negative voltage having a magnitude less than or equal to zero volts extending from the terminal positive voltage of the positive voltage phase, the negative voltage phase having a second sloped portion extending from the initial negative voltage to a terminal negative voltage having a magnitude less than or equal to zero volts, the negative phase waveform shape independently selectable from a second set of waveform shapes.

65. (Original) The method, as set forth in claim 64, wherein the initial positive voltage magnitude is in a range from about 0 volts to about 400 volts.

66. (Original) The method, as set forth in claim 64, wherein the terminal positive voltage magnitude is in a range from about 0 volts to about 400 volts.

67. (Original) The method, as set forth in claim 64, wherein the initial negative voltage magnitude is in a range from about 0 volts to about -400 volts.

68. (Original) The method, as set forth in claim 64, wherein the terminal negative voltage magnitude is in a range from about 0 volts to about -400 volts.

69. (Original) The method, as set forth in claim 64, wherein the first sloped portion comprises a positive slope.

70. (Original) The method, as set forth in claim 69, wherein the first sloped portion comprises a substantially linear slope.

71. (Withdrawn) The method, as set forth in claim 69, wherein the first sloped portion comprises a continuously increasing slope.

72. (Withdrawn) The method, as set forth in claim 69, wherein the first sloped portion comprises a continuously decreasing slope.

73. (Withdrawn) The method, as set forth in claim 64, wherein the first sloped portion comprises a negative slope.

74. (Withdrawn) The method, as set forth in claim 73, wherein the first sloped portion comprises a substantially linear slope.

75. (Withdrawn) The method, as set forth in claim 73, wherein the first sloped portion comprises a continuously increasing slope.

76. (Withdrawn) The method, as set forth in claim 73, wherein the first sloped portion comprises a continuously decreasing slope.

77. (Original) The method, as set forth in claim 64, wherein the second sloped portion comprises a positive slope.

78. (Original)The method, as set forth in claim 77, wherein the second sloped portion comprises a substantially linear slope.

79. (Withdrawn) The method, as set forth in claim 77, wherein the second positively sloped portion comprises a continuously increasing slope.

80. (Withdrawn) The method, as set forth in claim 77, wherein the second positively sloped portion comprises a continuously decreasing slope.

81. (Withdrawn) The method, as set forth in claim 64, wherein the second sloped portion comprises a negative slope.

82. (Withdrawn) The method, as set forth in claim 81, wherein the second sloped portion comprises a substantially linear slope.

83. (Withdrawn) The method, as set forth in claim 81, wherein the second positively sloped portion comprises a continuously increasing slope.

84. (Withdrawn) The method, as set forth in claim 81, wherein the second positively sloped portion comprises a continuously decreasing slope.

85-93. (Canceled)

94. (New) The defibrillator, as set forth in claim 48, wherein the first sloped portion comprises a continuously decreasing positive slope.

95. (New) The defibrillator, as set forth in claim 43, wherein the first sloped portion comprises a negative slope.

96. (New) The defibrillator, as set forth in claim 43, wherein the first sloped portion comprises a continuously increasing negative slope.

97. (New) The defibrillator, as set forth in claim 56, wherein the second sloped portion comprises a continuously increasing positive slope.

98. (New) The defibrillator, as set forth in claim 56, wherein the second sloped portion comprises a continuously decreasing positive slope.

99. (New) The defibrillator, as set forth in claim 43, wherein the second sloped portion comprises a negative slope.

100. (New) The defibrillator, as set forth in claim 99, wherein the second sloped portion comprises a substantially linear negative slope.

101. (New) The defibrillator, as set forth in claim 99, wherein the second sloped portion comprises a continuously increasing negative slope.

~~102~~. (New) The defibrillator, as set forth in claim ~~43~~, wherein the waveform includes an interphase delay between the positive voltage phase and the negative voltage phase.